

FRAME STRUCTURE FOR CELLULAR TELECOMMUNICATIONS SYSTEMS

Abstract

In order to double the size of cells for a UMTS/ UTRAN system operating in time division mode (TDD) from 3.75 km to 7.5 km, the node B station defines
5 the guard period for a downlink slot followed by an adjacent uplink slot to be longer than the guard period for an uplink slot followed by an adjacent downlink slot, whereby the cell size is extended. Each UE adjusts its timing in response to timing deviation signals transmitted at the start of each downlink burst, so as to transmit an uplink burst which arrives at the Node B, at the beginning of the next
10 uplink slot.